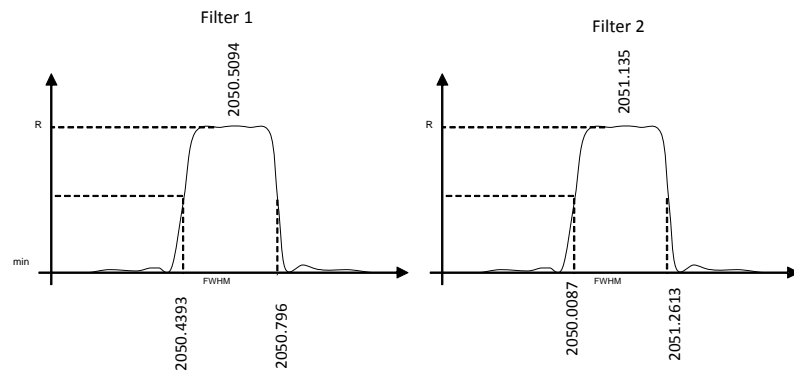
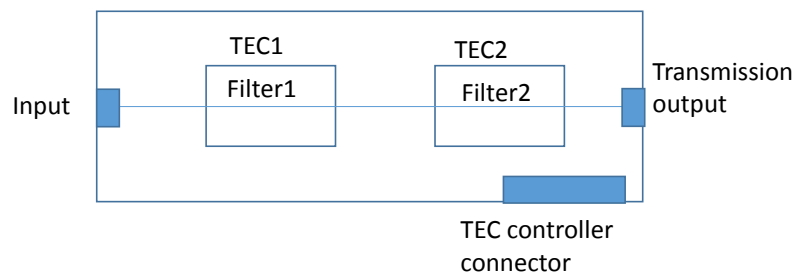


Fiber Bragg Grating (FBG) Filters shall meet the following Specifications

- 1) This is a dual filter package in a single enclosure for 2 μm wavelength application
- 2) **Filter1:** Shall reflect 2051.0087nm to 2051.2613 nm with a center wavelength of 2051.135nm
- 3) **Filter2 :** Shall reflect 2050.4393nm to 2050.796nm with the center wavelength at 2050.5094nm
- 4) Bandwidth tolerance $\pm 3\text{pm}$
- 5) Contrast R to min (see diagram) $> 23\text{dB}$
- 6) All wavelength is referenced to vacuum
- 7) The center wavelength shall not deviate more than $\pm 15\text{pm}$
- 8) Both filters shall reflect better than 95%
- 9) The two filters shall be mounted on separate thermo electric coolers inside the enclosure for individual temperature tuning
- 10) Operating temperature 20 to 25 $^{\circ}\text{C}$.The temperature shall be controlled to $.01^{\circ}\text{C}$ or better.
- 11) Tuning resolution shall be 2pm or better
- 12) The TEC Cooler and the control thermistor specifications shall be included in the delivery report
- 13) Input output connectors, FC/APC shall be incorporated in the box
- 14) Fiber type PM1950 Nufern
- 15) Size shall not bigger than 150x54x 20 (mm)
- 16) Side mode suppression shall have ratio $> 23\text{dB}$
- 17) The Temperature controller shall be capable of controlling the two thermo electric coolers in item 1, independently within 0.01°C of the set temperature value.



Wavelength configuration for the filters



Proposed package